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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,976	08/22/2003	Martin Lund	14218US02	1056
23446 7590 06/28/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER PAN, JOSEPH T	
			ART UNIT 2135	PAPER NUMBER
			MAIL DATE 06/28/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/646,976

Applicant(s)

LUND, MARTIN

Examiner

Joseph Pan

Art Unit

2135

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 May 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-24.

Claim(s) withdrawn from consideration: _____

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant argues:

"the combination of Lakshman and Chiussi does not disclose or suggest at least the limitation of "generating a destination port bit map based on the destination address information contained in said frame of digital data," (see page 3, last paragraph, Applicant's Arguments/Remarks)

Examiner maintains:

i. Lakshman discloses "Thus, a variety of filters may be implemented, e.g., those based only on source addresses for a given interface, those based only on destination addresses for a given interface, those based only on source ports for a given interface, those based only on destination ports for a given interface, or those based on any combination of fields." (see figure 1, element 35 'destination address; figure 7, element 130a 'generate bitmap vector (k=1)'; and column 1, lines 58-64 of Lakshman)

Lakshman further discloses "The router filtering algorithm 100 is now summarized with respect to FIG. 7. As indicated at step 105, off-line processing is performed, either in parallel or sequentially, to search through all of the router filter specifications, and, at step 110, to formulate corresponding arrays containing window intervals $w_{sub.i}$ for each dimension k , each having the potential filter candidates. Additionally, during off-line processing, a bit-mapped vector is generated for each window partition of the array containing those potential rules that may be applied to an incoming packet. Then, as indicated at step 120, a determination is made as to whether a packet is received. For each packet received, an on-line search process is performed, preferably simultaneously, as indicated by parallel processes 125a, . . . , 125n, to determine whether each packet header parameter belongs to a corresponding window(s) partition $w_{sub.i}$ of its corresponding array for each dimension $k=1$ to $k=n$. Once the window partitions are ascertained, at corresponding steps 130a, . . . , 130n, each of the potential filters contained in their corresponding bitmap vectors associated with the window $w_{sub.i}$, is read from the memory. Then, as indicated at step 135, a determination is made as to the intersection of all bitmap vectors corresponding to each of the dimensions to find a resultant vector indicating the one or more filters that must be applied to the packet. As mentioned above, this is easily implemented in hardware by performing a logical AND operation of the bit vectors, either sequentially or in parallel. Finally, as indicated at step 140, having ascertained the resultant filters to be applied from the resultant bit-map vector, the filter rule of the highest priority is invoked." (see column 5, lines 35-64 of Lakshman)

Lakshman discloses the bit map generated for various parameters such as source address (see figure 7 of Lakshman). However, Lakshman does not specifically mention the port bit map.

ii. Chiussi teaches multicasting cells in switching networks wherein Chiussi discloses the using the port bit map for selecting port(s) for routing (see column 5, lines 55-62 of Chiussi).

iii. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Chiussi into the method of Lakshman to utilize the port bit map.

iv. The ordinary skilled person would have been motivated to have applied the teaching of Chiussi into the system of Lakshman to utilize the port bit map, because Chiussi utilizes the port bit map to select port(s) for routing, and Lakshman also utilizes bit map(s) for routing based on various parameters in the data packet, therefore Chiussi's teaching would enhance Lakshman's system.

Therefore, Lakshman and Chiussi disclose generating a destination port bit map based on the destination address information contained in said frame of digital data.

Applicant argues:

"the combination of Lakshman and Chiussi does not disclose or suggest at least the limitation of "comparing said destination port bit map with a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated based on information in said received frame of digital data," (see page 5, 3rd paragraph, Applicant's Arguments/Remarks)

Examiner maintains:

Lakshman discloses "Another comparison is made to determine from the associated bitmap vectors whether any potential filter rule exists that is common to each vector. One of the potential filter rules having that commonality will be applied to the packet depending upon the priority of that rule." (see column 2, lines 44-46 of Lakshman)

Lakshman further discloses "The router filtering algorithm 100 is now summarized with respect to FIG. 7. As indicated at step 105, off-line processing is performed, either in parallel or sequentially, to search through all of the router filter specifications, and, at step 110, to formulate corresponding arrays containing window intervals $w_{sub.i}$ for each dimension k , each having the potential filter candidates. Additionally, during off-line processing, a bit-mapped vector is generated for each window partition of the array containing those potential rules that may be applied to an incoming packet. Then, as indicated at step 120, a determination is made as to whether a packet is received. For each packet received, an on-line search process is performed, preferably simultaneously, as indicated by parallel processes 125a, . . . , 125n, to determine whether each packet header parameter belongs to a corresponding window(s) partition $w_{sub.i}$ of its corresponding array for each dimension $k=1$ to $k=n$. Once the window partitions are ascertained, at corresponding steps 130a, . . . , 130n, each of the potential filters contained in their corresponding bitmap vectors associated with the window $w_{sub.i}$, is read from the memory. Then, as indicated at step 135, a determination is made as to the intersection of all bitmap vectors corresponding to each of the dimensions to find a resultant vector indicating the one or more filters that must be applied to the packet. As mentioned above, this is easily implemented in hardware by performing a logical AND operation of the bit vectors, either sequentially or in parallel. Finally, as indicated at step 140, having ascertained the resultant filters to be applied from the resultant bit-map vector, the filter rule of the highest priority is invoked." (see figure 7, element 135 'compute intersection of all bitmap vectors'; and column 5, lines 35-64 of Lakshman)

Therefore, Lakshman discloses comparing said destination port bit map with a physical port security bit map to generate a bit map of allowed destination ports, wherein said physical port security bit map is generated based on information in said received frame of digital data.

KIM VU

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